

REMARKS

In response to the Restriction Requirement, Applicants hereby provisionally elect, with traverse, the invention of Group I, claims 28-35, drawn to a process of preparing an aqueous crystalline biogenic silica.

The grounds for traversal are as follows.

The instant application is a 371 National stage application of PCT/AU2005/000188, and thus, PCT rules should apply under these circumstances.

PCT Rule § 13.1 states, "The international application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ("requirement of unity of invention)"). PCT Rule § 13.2 provides that "Where a group of inventions is claimed in one and the same international application, the requirement of unity of invention referred to in Rule § 13.1 shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art". Thus, the requirement is art-based.

Applicant respectfully traverses the Examiner's objection for absence of a common technical feature among Groups

I-VII. Applicant submits that the Official Action fails to satisfy the requirements of PCT Rule § 13.1 and PCT Rule § 13.2.

The Office takes the position that the claims lack unity of invention, because the technical feature therein is not a contribution over the prior art, citing EP0301858B1. In this regard, the Office argues that EP0301858B1 teaches biogenic silica. The claims of Groups I-VII, however, share a common technical feature of an aqueous crystalline biogenic silica that is not taught in the prior art.

Each of Groups I-VII share an aqueous crystalline biogenic silica prepared according to the method of claim 28. The silica is derived from organic materials and is soluble in aqueous solution. The method of claim 28 (Group I) generates a silica matrix with a colloidal structure. Such catalytically enriched silicate structures have a high number of reactive pores and channels, resulting in a matrix having a high porosity. The matrix has a plurality of catalytically active reactive sites. Within the matrix, a variety of reaction mechanisms, including hydrogen bonding, coordination complexing, Lewis acid/base formation, covalent bonding, P-pi to D-pi bonding, are present. The aqueous biogenic silica is a highly reactive substance that bonds with many reactive elements to form stable compounds. This aqueous crystalline biogenic silica defines a contribution over the prior art, and in particular EP0301858B1.

EP0301858B1 describes biogenetic silica in a substantially amorphous state. In the presence of a liquid waste, the silica relies on polyvalent metal ions to form a cementitious product that effectively solidifies and chemically fixes the waste (see, column 2, lines 47-56). EP0301858B1 fails to teach or suggest silica with a colloidal structure or having catalytically enriched silicate structures that is produced by the presently claimed method of claim 28.

For these reasons, Applicant submits that EP0301858B1 cannot be considered as relevant to the claims. The disclosure in EP0301858B1 is insufficient and EP0301858B1 fails to teach or suggest each and every element of the claims.

Thus, in view of the above, Applicant respectfully submits that the present claimed invention is a contribution over the prior art and that unity of invention for Groups I-VII should be recognized. As a result, the Official Action fails to satisfy its burden in showing that the claims lack a special technical feature. All of the claims are sufficiently related so as to warrant a search and examination of all the claims in their full scope. Such action is respectfully requested at this time.

In the event that the Office disagrees with the traversal and maintains the Restriction requirement, then kindly consider the possibility of rejoinder of the non-elected subject matter, upon a determination of allowance of the election invention, per U.S. practice and M.P.E.P. § 821.04.

Favorable action on the merits is solicited.

Should there be any matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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